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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/714,642

11/18/2003

Masayuki Takenaka

117215

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EXAMINER

LE, TAN

ART UNIT

PAPER NUMBER

3632

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/714,642	<b>Applicant(s)</b> TAKENAKA ET AL.	
	<b>Examiner</b> Tan Le	<b>Art Unit</b> 3632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This office action is in responding to Applicant's amendment filed 3/09/09, which has been entered. Claim 27 remains in this application. Claims 1-26 have been canceled.

#### ***Allowability withdrawn, new rejection***

The indicated allowability of claim 27 is withdrawn in view of the newly discovered reference(s) to Chiao. Rejections based on the newly cited reference(s) follow.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### **Claim Rejections - 35 USC § 103**

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Patent No. 6,166,498 to Yamaguchi et al. in view of US patent No. 5,460,234 to Matsuura et al. and further in view of US Patent No. 7,119,454 to Chiao.

Yamaguchi et al. discloses a drive unit for hybrid vehicles comprising: a control unit section (46, 49, 51 ) (Fig. 1, for example ) of a drive unit (10) provided with an electric motor (16) being mounted on the drive unit (10) to be united therewith, the control unit section, comprising: a power unit (50, 54, 53); and a control unit (46, 51), the power unit being mounted to the drive unit (10), and the control unit being supported

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on the drive unit (10). The control unit comprises a control board (57a, 57b (col. 5, line 8) mounted to a base 49, 61 to control the drive unit. Yamaguchi does not disclose expressly the control unit being elastically supported on the drive unit using a vibration mechanism which is made of vibration proof material and has a resonance frequency, which is at least a primary frequency of a cylinder firing of the internal combustion engine and at most of resonance frequency of the control board.

Matsuura teaches the batteries (B and 77 (batteries box), Fig. 8) and the control unit U (Fig. 9) are supported by plate 79 on connectors 16, which is in turn supported a vehicle frame in a vibration proof manner (through rubber dampers 24, 28, 38, 40, 67, 76 and cushion 8 for example altogether) for providing better vibration or shock isolation to the control unit.

Chiao teaches the vibration damping mounting structure/material 156, 166 of Fig. 3a, 3b mounting on a support plate 162 and a mounting bolt 164 to provide mounting isolation from the support plate. Thus vibrations would travel between the vehicle and the accessories are largely absorbed by vibration damping material.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a support plate or base, which is supported through vibration proof mechanism on the drive unit on the Yamaguchi et al as taught by Matsuura et al in view of Chiao in order to provide better vibration performance or better isolation to the control unit section which is exposed to vibrations during running vehicle.

It would also have been obvious to one having ordinary skill in the art at the time the invention was made to have the vibration proof mechanism with material that has a

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resonance frequency, which is at least a primary frequency of a cylinder firing on the internal combustion engine and at most a resonance frequency of the control board, since it has been held to be within the general skill of a worker in the art to select a known mechanism/material on the basis of its suitability for the intended use as a matter of obvious design choice. In addition, setting damping means (or resonance to specific level that cause vibration) to have the same frequency zone with the vibrations of the vehicle or to have at least a primary frequency of a cylinder firing on the internal combustion engine and at most a resonance frequency of the control board for maximum reducing transmitted vibration is well known in the art and involves only routine skill in the art.

### ***Conclusion***

The indicated allowability of claim 27 is withdrawn in view of the newly discovered reference to Chiao. Accordingly, this action is made NON-Final.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Le whose telephone number is (571) 272-6818.

The examiner can normally be reached on Mon. through Fri. from 9:00 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allen J. Shriver can be reached on (571) 272-6689. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Amy J. Sterling/  
Primary Examiner, Art Unit 3632  
3/26/09

/T. L./  
Examiner, Art Unit 3632